should be exerted upon the membrane of the round window as compared with that brought to bear upon the stapes or the membrane of the oval window; care should also be taken to leave no enclosed air space between the membrane of the window and the cotton tampon, the space in question acting as a resonance chamber and serving therefore to reinforce certain tones and give the effect of autophany. The peculiar variations in hearing incident to suppurative processes in the middle ear, with perforation of the drumhead, and especially the better hearing when the middle ear is moderately moist with discharge, is accounted for by the fact that the presence of the fluid, in the more dependent portion of the cavity, somewhat inhibits the movement of the membrane of the round window and leaves it free to respond, correlatively, to the impulse received at the oval window and transmitted through the medium of the intralabyrinthine fluid.

Aural Sounds of Muscular Origin.—The observations of DEDEK (*Monatschr. f. Ohrenh.*, 1914, xlviii, 3) upon both subjective and objective noises in the ear, of muscular origin, include not only the intrinsic muscles of the sound transmitting apparatus of the middle ear, but also those having their origin in the movement of the palatal and tubal muscles especially, but occasionally resulting from the action of such extraneous muscular bundles as the attolens and attrahens auriculæ. One illustrative case had its origin in spasmodic contraction of the pharyngeal muscles developing as the result of a traumatic neurosis and comparable to the sound of the ticking of a watch or the snapping of the finger nails, recurring as often as one hundred and forty times in a minute, multisynchronous neither with the patients pulse nor breathing, and audible, in stillness, at a distance of five meters. There was no determinable movement of the membrana tympani but distinctly visible movement of the soft palate accompanied by similar movements of the neck and, sometimes, of the face muscles, all of these movements being synchronous with the objective sound. Checking of the palatal movement, holding the breath, depression of the tongue or tickling of the nasal mucous membrane caused a cessation of the muscular activity and consequently of the produced sound but catheterizing or even bougieing of the tympanopharyngeal tube had no similar effect. Inspection of the faucial opening of the tube during the production of the sound showed a very slight vertical movement of the wide open tube. The psychic condition of the patient had an evident influence upon the intensity of the sound produced and the muscles principally implicated were the tensor and levator veli in addition to the salpingopharyngeous.

Subsequent Dressings of Mastoid Operations.—WEISSMANN (*Rev. hebd. de laryng.*, 1914, No. 19) practices, and advises, as the best method of after-treatment of mastoidectomies, whether acute or chronic, whether the antrum be opened or the mastoid cavity completely evacuated with inclusion of the bony wall of the middle and posterior fossæ, primary closure of the postaural wound without drainage. The exceptional cases are those in which an intracranial complication has to be considered, an extradural abscess or possibly a wound of the sinus; these cases are, primarily, to be packed, but the tampons omitted so soon as there is no longer danger of hemorrhage or other complication. The stitch closure of the postaural wound is also contra-indicated in cases of coincident subcutaneous abscesses, infiltration and maceration of the dermis and in the presence of fistulous openings; even under these conditions the author dispenses with packing and applies only a superficial dressing and bandage. In the cases of primary closure if, at the end of eight days, the ear is not becoming dry and the postaural wound is not in good condition the stitches should be removed and the wound opened and drained. The author further advises the primary and complete closure of the postaural wound in the radical operation, as well as in the simple mastoid exenteration and also the omission of gauze wicks in the external auditory canal. On the fifth or sixth day the bandage and dressings are removed and, if there is much discharge or offensive odor, the wound is syringed with boiled water to which a moderate amount of hydrogen dioxide is added; on the eighth day the stitches are removed and on the tenth day the postaural bandage is dispensed with and the subsequent treatment is that customarily applied to an uncomplicated suppurative process in the middle ear with frequent mild antiseptic cleansing followed by insufflation of boric acid powder and similar substances. All of the cases of this class should be continued under careful and stated observation in order to attain the best results. The contra-indications to a primary stitch closure of the postaural wound in the cases of radical operation and the precendent application of gauze packing are the same as in cases of the simple mastoid operation.

PATHOLOGY AND BACTERIOLOGY

UNDER THE CHARGE OF
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Butyric Acid Sclerosis of the Arteries.—Metchinkoff claimed that the products of bacterial fermentation in the bowel were important factors in causing a chronic intoxication and arteriosclerosis. He was able to demonstrate the effect of paracresol in this manner. The importance of this intoxication, he believes, does not lie in heavy individual doses, but rather in the cumulative effect of the absorbtion of small quantities. In a similar manner Dratchinski was able to experimentally reproduce arterial lesions by feeding small quantities of indol over a long period